

Cambridge University Press

978-1-107-01290-5 - Testosterone: Action, Deficiency, Substitution: Fourth Edition

Edited by Eberhard Nieschlag and Hermann M. Behre

Frontmatter

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Testosterone

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CAMBRIDGE UNIVERSITY PRESS

Cambridge, New York, Melbourne, Madrid, Cape Town,
Singapore, São Paulo, Delhi, Mexico City

Cambridge University Press

The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America

by Cambridge University Press, New York

www.cambridge.org

Information on this title: www.cambridge.org/9781107012905

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Third edition published 2004

Fourth edition published 2012

Printed in the United Kingdom at the University Press, Cambridge

A catalog record for this publication is available from the British Library

Library of Congress Cataloging-in-Publication Data

Testosterone : action, deficiency, substitution / edited by
Eberhard Nieschlag, Hermann M. Behre ; associate editor,
Susan Nieschlag. – 4th ed.

p. ; cm.

Includes bibliographical references and index.

ISBN 978-1-107-01290-5 (Hardback)

I. Nieschlag, E. II. Behre, H. M. (Hermann M.), 1961–

III. Nieschlag, S. (Susan)

[DNLM: 1. Testosterone–therapeutic use. 2. Testosterone–physi-
ology. WJ 875]

615.3'66–dc23

2011049739

ISBN 978-1-107-01290-5 Hardback

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Preface

Testosterone is the focal point of male reproductive health. Testosterone is responsible for all male characteristics, and testosterone deficiency results in hypogonadism which has an impact on the entire male organism. Testosterone plays an important role in male aging. Many diseases, especially mood disorders, cardiovascular diseases and the metabolic syndrome can be caused by testosterone deficiency, but can also result in hypogonadism. Consequently, testosterone is a key factor in the treatment of male disorders; benefits and risks of such treatment need to be balanced. The potent effects of testosterone also give rise to their misuse, prompting the establishment of sensitive detection systems, but also bearing adverse side-effects. Measuring testosterone in body fluids based on immunoassays was the basis for research in male pathophysiology over decades; however, methodology is currently shifting to gas or liquid chromatography tandem mass spectrometry. The hopes for a male hormonal contraceptive rest on testosterone as its major constituent. As estrogens derived from testosterone play a role in male physiology, testosterone also is of importance for general and sexual health in women. Finally, new therapeutic applications are expected from selective androgen receptor modulators (SARMs).

A tremendous amount of new knowledge has accumulated over the eight years since the third edition of this book on testosterone appeared. The 25 chapters of the current volume, written by worldwide leading experts in their field, encapsulate this progress. The book appeals to the clinician as well as to the basic

scientist wishing for an authoritative overview of this central area of male reproductive health.

In order to synchronize the writing of the various chapters, the authors assembled at Castle Hohenkammer in Bavaria in October 2011 for three days, and finalized their writings during that time. This served to unify the work as a whole, and ensures that it represents the most up-to-date reference source on testosterone and its many facets. This coordinated effort of all contributors guarantees a long half-life of this book as an up-to-date reference source.

The editors wish to thank the authors of the various chapters for their excellent compliance and timely submission of manuscripts. We could not have concluded this task without the tireless reading capacity and help from Susan Nieschlag, who as a professional edited all manuscripts; nor would the volume have come to fruition without the skilful assistance of our secretaries Maria Schalkowski and Ina Nelles, who processed the manuscripts expediently. Finally, the project and the meeting would not have been possible without the generous support from Bayer Health Care (formerly Bayer Schering Pharma), the International Society of Andrology (ISA), the European Academy of Andrology (EAA), the German Association for Reproductive Health, the Clinical Research Group for Reproductive Medicine, Galen Pharma, Merck Serono, Ferring Pharmaceuticals and our home institutions, the Centers for Reproductive Medicine and Andrology at the Universities of Münster and Halle.